

IN THE CLAIMS

Please cancel claims 1-7 and add new claims 8-16 so that the claims hereafter read as follows:

1-7. (Canceled)

8. (New) A system for generating light at a variety of wavelengths and directing the same along a common axis, comprising:

a plurality of tunable lasers, each of the tunable lasers having a different base wavelength and being tunable therefrom, and each of the tunable lasers being spatially offset from one another;

a grating for receiving the light from each of the spatially offset tunable lasers and directing the same along a common axis, wherein the grating is configured so that when each of the spatially offset tunable lasers is radiating light at its base wavelength, the grating redirects the light from each of the spatially offset tunable lasers along the common axis;

a first thermo-optic prism for steering the light from each of the spatially offset tunable lasers so that when the spatially offset tunable lasers are tuned so as to generate light at an adjusted wavelength which is different from its base wavelength, the first thermo-optic prism will direct the light from each of the spatially offset tunable lasers into the grating at an angle which compensates for the difference between the adjusted wavelength and the base wavelength so that the light from that laser will emerge from the grating along the common axis; and

a second thermo-optic prism for correcting an aberration introduced by the first thermo-optic prism in order to restore the quality and shape of the light from each of the spatially offset tunable lasers.

9. (New) A system according to claim 8 wherein the system further comprises a collimating lens positioned after the plurality of tunable lasers and before the first thermo-optic prism.

10. (New) A system according to claim 8 wherein the system further comprises a focus lens positioned after the grating.

11. (New) A system according to claim 8 wherein the system further comprises an optical fiber for receiving the light from the grating.

12. (New) A system according to claim 8 wherein the first thermo-optic prism and the second thermo-optic prism are positioned between the plurality of tunable lasers and the grating.

13. (New) A system according to claim 8 wherein the first thermo-optic prism is positioned between the plurality of tunable lasers and the grating, and the second thermo-optic prism is positioned after the grating.

14. (New) A system according to claim 8 wherein the first thermo-optic prism further comprises adjustment means for

adjusting the temperature of the first thermo-optic prism so as to adjustably steer the optical beam.

15. (New) A system according to claim 14 wherein the adjustment means comprise at least one selected from a group consisting of heat, an electric field, and a magnetic field.

16. (New) A system according to claim 8 wherein the plurality of tunable lasers comprises at least 12 tunable lasers.